REMARKS

The Examiner is thanked for the thorough examination of the present application and the indication that claims 6-9, 15-18, 24-27, and 33-36 embody allowable subject matter. The Office Action, however, tentatively rejected the remaining claims. In response, Applicant submits the following distinguishing remarks. Applicant respectfully requests reconsideration and withdrawal of the rejections for at least the following reasons.

Rejections under 35 U.S.C 103(a)

Claims 1-4, 10-13, 19-22 and 28-31 are rejected under 35 U.S.C 103(a) as allegedly being unpatentable over Yang et al (2003/0233290) in view of Wang et al (2005/0038684) and Helmolt et al (2003/0172007). Applicant requests reconsideration and withdrawal of the rejections.

In regard to claims 1, 10, 19 and 28, Yang, Wang and Helmolt do not teach or suggest what the Office Action relies upon the references as supposedly teaching. In particular, Yang, Wang, and Helmolt fail to disclose, suggest, or teach, *inter alia*, the following features recited in these claims:

"***determining whether the first lot having WIP status is picked for another pre-picked invoice by the computer, and, if so, not to show the first lot for selection***";

"***picking an order corresponding to a product, picking the first lot corresponding to the same product having WIP status, and generating a pre-picked invoice including the order and the first lot***";

"*determining whether the first lot has achieved F/G (Finished Goods) status at a first shipping time*"; and

"***automatically generating a first real invoice corresponding to the pre-picked invoice for the order and the first lot*** *if the first lot has achieved F/G status*".

First, in the present Official Action, the Examiner alleged that paragraphs [0143]-[0144] of the Helmolt reference discloses the claimed feature of "***determining whether the first lot having WIP status is picked for another pre-picked invoice by the computer, and, if so, not to show the first lot for selection***". Applicant respectfully disagrees. Applicant has carefully reviewed related paragraphs of the Helmolt reference, particularly [0143]-[0144] of the Helmolt reference, nowhere in the Helmolt reference does it disclosed the claimed feature of "determining whether the first lot having WIP status is picked for another pre-picked invoice by the computer, and, if so, not to show the first lot for selection".

In particular, these paragraphs of Helmolt actually state:

> **[0143]** The fulfillment coordination engine also can be used to coordinate the logistics of fast- and slow-moving items in a cross-docking warehouse scenario, such as a retail warehouse service in which the engine coordinates the movement of goods from the vendor to the retailer's store. This scenario is a variation of the pull warehouse scenario, described above, as applied to retail businesses. In particular, this scenario includes situations in which there is a large assortment of goods and it is not worth warehousing all the goods in every warehouse. The goods are stored in two types of warehouses: a fast-moving item warehouse and a slow-moving item warehouse. The fast-moving item warehouse is used to hold articles that sell quickly. Re-ordering of extra items for the fast-moving item warehouse is made the evening before the following morning in which they are needed. The slow-moving item warehouse is used to hold articles that do not sell as quickly. Re-ordering of extra items for the slow-moving warehouse is made up to the midday before the following morning. The cross-docking scenario involves using containers that have been pre-picked for individual stores from the slow-moving item warehouse. Then, the slow-moving and fast-moving item containers are delivered to the store together in a single delivery. The individual stores order all articles together from an organizing facility. A benefit of using the fulfillment coordination engine in this scenario is that there can be an optimization of routes from the slow-moving item warehouses to the fast-moving item warehouses, and from the fast-moving item warehouses to the stores. Another benefit is the optimization of the delivery to the store by using only one delivery for all the goods to each store. In addition, allocation of articles to the warehouses can be beneficially optimized to reduce inventory costs.

[0144] The fulfillment coordination engine can be used for cross-docking delivery of goods for a warehouse service that manages retail goods by providing outbound delivery of the goods from the vendor to the retailer's store. In cross-docking, the goods are delivered directly to the point of sale, such as a retailer's shelf. In the warehouse, the goods are received, sorted, and sent to the retailer without being stored in the warehouse. For example, the engine can be used to manage the logistics where multiple warehouses and vendors deliver to a store, but the store desires a single daily delivery. The engine also can be used to manage the logistics of the cross-docking of single article vendor and retail warehouse pallets, pre-picked retailer and vendor warehouse pallets/containers, and flow-through of handling units from inbound pallets to outbound containers for the stores. In one implementation, the logistics is controlled by the engine by having the warehouse platform that receives the goods being empty at night, using inbound deliveries of goods from other warehouses in the morning, and outbound delivery of goods to the retailers in the afternoon. In this manner, the cross-docking warehouse is empty at the end of the day. In this scenario, the engine is used to optimize the routes from warehouses or vendors that supply the goods to the cross-docking platforms, as well as optimize the routes from the cross-docking platforms to the retailers' stores. Retailers will benefit because there will be only one delivery per store and the delivery will be consolidated. Moreover, the retailer will have faster lead times for ordering goods because the goods arrive at the cross-docking warehouse every morning and are supplied to the retailer that day.

As can be readily verified from a review of the foregoing paragraphs of Helmolt, the claimed feature is not disclosed in these referenced portions.

In addition, in the claimed embodiments, a **pre-picked invoice can be first generated for an order and at least one lot being manufactured.** When the lot specified by the pre-picked invoice has achieved F/G**, the pre-picked invoice can be automatically and immediately transformed into a real invoice.** In details, an order corresponding to a product is first selected (picked), and at least a lot corresponding to the same product is then selected (picked). After the picking, a **pre-picked invoice is generated for the selected order and lot.** Thereafter, the status of the selected lot is periodically checked to determine whether the status of the selected lot is changed from the WIP status to the F/G status. Once the status of the selected lot has been changed

from the WIP status to the F/G status, the pre-picked invoice is transformed to automatically generate a real invoice for the selected order and lot.

The Office Action alleged that the Yang reference discloses the claimed feature of "determining whether the first lot has achieved F/G (Finished Goods) status at a first shipping time, and, if so, to automatically generate a first real invoice corresponding to the pre-picked invoice for the order and the first lot if the first lot has achieved F/G status", in which paragraph [0024] of the Yang reference discloses WIP reports, paragraph [0018] of the Yang reference discusses finished goods rolling output reports, WIP inventory reports, and other reports, paragraph [0103] of the Yang reference discloses: "6 Status of a Lot Inconsistent with WIP Quantity, and paragraph [0052] of the Wang reference discloses that it "may perform automatic pick, pre-pick, and other function". Applicant respectfully disagrees with this application of the teachings of Yang.

In the Yang reference, WIP reports are provided, and lot tracking disclosed in [0024] of the Yang reference means the relationships between the lots (parent lots and child lots), and performed accordingly. The applicant respectfully disagrees. The applicant has also carefully reviewed the Yang reference. It is noted that, **no concept of pre-pick and real invoices is disclosed in the Yang reference**. In the Yang reference, the supply chain management and related reports are disclosed. **It is understood that, several reports may be provided during manufacturing. However, the use of these reports is more important than themselves**. As described, in the claimed invention, **a pre-picked invoice is first generated for an order and at least one lot being manufactured, and the pre-picked invoice is**

automatically and immediately transformed into a real invoice when the lot specified by the pre-picked invoice has achieved F/G. **Nowhere in the Yang reference does it disclose the claimed feature of "generating a pre-picked invoice including the order and the first lot, and automatically generating a first real invoice corresponding to the pre-picked invoice for the order and the first lot if the first lot has achieved F/G status".**

Paragraph [0020] of the Yang reference states: "In the semiconductor manufacturing industry in order to procure finished goods (for example a finished semicondcutor chip), a buyer first orders wafers from a Fab supplier (foundry); once the work at the Fab supplier is finished, the buyer orders sorting from a Wafer Sort supplier; after the Wafer Sort work is finished, the buyer orders Assembly from an Assembly supplier; and finally, the buyer orders Final Test from a Final Test supplier. The supply chain management system is able to perform group order generation for groups of dependent suppliers (such as Fab, Wafer Sort, Assembly and Final Test suppliers) in the supply chain". It is noted that, **Yang discloses the standard procedure of supply chain management**, but ***nowhere does Yang disclose the generation of a pre-pick invoice, and the transformation of the pre-pick invoice for generating a corresponding real invoice when the lot specified by the pre-pick invoice has achieved F/G status***.

Similarly, paragraph [0048] of the Yang reference discloses an example of a finished goods rolling output report with package planning, however, **nowhere does Yang disclose the generation of a pre-pick invoice, and the transformation of the**

pre-pick invoice for generating a corresponding real invoice when the lot specified by the pre-pick invoice has achieved F/G status.

Additionally, paragraphs [0127]-[0128] of the Yang reference disclose:

> "2. Consistency Between WIP and Production Order. For example, Production Order No, Device, Item No, and Qty in WIP should match with the production order information.
> 3. Consistent Between DTR and Production Order. For example, production order no, device, item no, and qty in DTR should match with the production order information."

It is clear that, Yang only relevantly discloses that the product order information should be matched with the information in WIP and DTR, thus to maintain the data consistency. However, **nowhere does Yang disclose the generation of a pre-pick invoice, and the transformation of the pre-pick invoice for generating a corresponding real invoice when the lot specified by the pre-pick invoice has achieved F/G status.**

Further, as described in Applicant's previous responses, paragraph [0202] of the Yang reference **only relevantly discloses that when WIP status is complete, an invoice is received, and awaits approval**. Nowhere in the Yang reference does it disclose **the concept and features of the pre-picked invoice, and the transformation of the pre-picked invoice (automatically generating a real invoice corresponding to the pre-picked invoice for the order and the first lot if the first lot has achieved F/G status).**

Further, the Examiner equated the term "pre-pick" in the Wang reference to the claimed feature of "***generating a pre-picked invoice including the order and the first lot***". Applicant respectfully disagrees with this interpretation of Wang. However, **only a**

term "pre-pick" is present in the Wang reference, and no more detail is discussed.

Unfortunately, the previous Official Actions failed to respond to these arguments/distinctions. Accordingly, Applicant repeats these points of distinction, and respectfully requests responsive comments.

Since Yang, Wang and Helmolt collectively fail to teach the above features of the claimed embodiments, Applicants submit that claims 1, 10, 19 and 28 are patentable over the cited reference. Insofar as claims 2-4 and 6-9 depend from claim 1, claims 11-13 and 15-18 depend from claim 10, claims 20-22 and 24-27 depend from claim 19, and claims 29-31 and 33-36 depend from claim 28 are similarly believed to be patentable. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Further, dependent claims are also patentable based on their own features.

As a separate and independent basis for the patentability of all claims, Applicant submits that the combination of Yang, Wang, and Helmolt is improper and therefore does not render the claims obvious. In this regard, the Office Action combined Wang with Yang on the solely expressed basis that "it would have been obvious ... in order to 'serve its customers' demands in the field of supply chain management." (see e.g., Office Action, p. 3). The Office Action further combined Helmomlt the solely expressed basis that "it would have been obvious ... in order for 'order fulfillment coordination in a supply chain'." (see e.g., Office Action, p. 4).

This rationale is both incomplete and improper in view of the established standards for rejections under 35 U.S.C. § 103.

In this regard, the MPEP section 2141 states:

> The Supreme Court in KSR reaffirmed the familiar framework for determining obviousness as set forth in Graham v. John Deere Co. (383 U.S. 1, 148 USPQ 459 (1966))... As reiterated by the Supreme Court in KSR, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:
>
> (A) Determining the scope and content of the prior art; and
>
> (B) Ascertaining the differences between the claimed invention and the prior art; and
>
> (C) Resolving the level of ordinary skill in the pertinent art.

In addition:

> When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:
>
> (A) The claimed invention must be considered as a whole;
>
> (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
>
> (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention and
>
> (D) Reasonable expectation of success is the standard with which obviousness is determined.

Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

As reflected above, the foregoing approach to obviousness determinations was recently confirmed by the United Stated Supreme Court decision in KSR INTERNATIONAL CO. V. TELEFLEX INC. ET AL. 550 U.S. 1, 82 USPQ2d 1385, 1395-97 (2007), where the Court stated:

> In Graham v. John Deere Co. of Kansas City, 383 U. S. 1 (1966), the Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in Hotchkiss v. Greenwood, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15–17. The analysis is objective:
>
> "Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be

> ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." Id., at 17–18.

Indeed, as now expressly embodied in MPEP 2143, "[t]he ***key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious***. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit." (*Emphasis added, MPEP 2143*). "Objective evidence relevant to the issue of obviousness ***must*** be evaluated by Office personnel." (MPEP 2141). "The key to supporting any rejection under 35 U.S.C. 103 is the ***clear articulation of the reason(s)*** why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 ***should be made explicit***. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that '[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" (MPEP 2141).

Simply stated, the Office Action has failed to at least (1) ascertain the differences between and prior art and the claims in issue; and (2) resolve the level of ordinary skill in the art. Furthermore, the alleged rationale for combining the references is merely an improper conclusory statement that embodies clear and improper hindsight rationale. As noted above, the alleged motivations for combining Wang and Helmolt with Yang were: "in order to 'serve its customers' demands in the field of supply chain management" and "in order for 'order fulfillment coordination in a supply chain'." These

motivations, however, are merely subjective conclusions, and have not been supported by objective teachings. Further, no discussion was provided in the Office Action as to why one skilled in the art would view Yang as deficient in these areas (purportedly leading to the motivation to identify an improvement). As such, the Office Action fails to set for the required objective indicia appropriate to support the rejection.

For at least these additional reasons, Applicant submits that the rejections of all claims are improper and should be withdrawn.

CONCLUSION

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

No fee is believed to be due in connection with this response. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

/Daniel R. McClure/

By: _____
Daniel R. McClure
Registration No. 38,962

Thomas, Kayden, Horstemeyer & Risley, LLP
600 Galleria Pkwy, SE
Suite 1500
Atlanta, GA 30339
770-933-9500